CLAIMS

1) Process for the preparation of aqueous emulsions of (poly)isocyanate oils and/or gums and/or resins, characterized in that a mixture consisting of the following is blended

- 100 parts by weight of an advantageously masked (poly)isocyanate phase (A) of dynamic viscosity at 25°C at least equal to 3 Pa s, preferably at least equal to 30 Pa s. Or [sic] of consistency at 25°C at least equal to 200, advantageously masked (poly)isocyanate phase including at least one oil and/or at least one gum and/or at least one resin containing advantageously masked (poly)isocyanate groups;
- 2 to 20 parts by weight, preferably from 3 to 15 parts by weight of water;
- 3 to 20 parts by weight, preferably from 5 to 15 parts by weight of at one least surface-active agent (B) or a combination of 0.5 to 10 parts by weight, preferably from 1 to 10 parts by weight of at least one surface-active agent (B) and of 2.5×10^{-4} to 20 parts by weight, preferably of 0.001 to 15 parts by weight of at least one thickening water-soluble polymer (C) of molecular mass which is higher than 10 000 g/mole, preferably higher than 100 000 g/mole,

the said surface-active agent or mixture of surface-active agents exhibiting an HLB of at least 10 and the relative quantities of water, of constituent(s) (B) and optionally (C) being such that the viscosity or the consistency of the mixture of water + surface-active agent(s) + optional thickening water-soluble polymer(s) is close to or higher than one tenth of the viscosity or consistency of the advantageously masked (poly)isocyanate phase (A), preferably close to or higher than the viscosity or consistency of the advantageously masked (poly)isocyanate phase (A);

the said blending being carried out over a period and in shear conditions which are sufficient to obtain an emulsion of "oil-in-water" type with a particle size of the order of 0.1 to 5 micrometres, preferably of the order of 0.2 to 3 micrometres;
and in that the mixture is optionally diluted with water as a function of the desired solids content.

2) Process according to claim 1), characterized in that the (poly)isocyanate(s) phase (A) is chosen from the following phases consisting respectively of:

- An oil and/or a gum and/or a resin containing (poly)isocyanate groups of viscosity at least

equal to 3 Pa s, preferably of the order of 30 to 2,500 Pa s. Or [sic] of consistency of the order of 200 to 2,000;

- A mixture of oil(s) and/or gum(s) and/or resin(s) containing (poly)isocyanate groups (s) [sic] mixture of viscosity at least equal to 3 Pa s, preferably of the order of 30 to 2,500 Pa s. Or [sic] of consistency of the order of 200 to 2,000;
- A mixture of oil(s) and/or gum(s) and/or resin(s) containing (poly)isocyanate groups (s) [sic] and of at least one solvent for the said oil and/or gum and/or resin, mixture of viscosity at least equal to 3 Pa s, preferably of the order of 30 to 2,500 Pa s. Or [sic] of consistency of the order of 200 to 2,000.

3) Process according to one of claims 1) to 2), characterized in that the surface-active agents (B) are nonionic, of HLB higher than 10, preferably of the order of 10 to 20, anionic, cationic, zwitterionic or amphoteric of HLB higher than 10.

4) Process according to one of claims 1) to 3), characterized in that the thickening polymers (C) are soluble to at least 50 % in water and are chosen from polyvinyl alcohols, polyethylene glycols, polyvinylpyrrolidones, alkali metal polyacrylates, carrageenans, alginates, methyl celluloses,

hydroxypropyl celluloses, hydroxyethyl celluloses etc.

5) Process according to one of claims 1) to 4), characterized in that the operation of emulsifying of the (poly)isocyanate(s) phase is carried out by introducing at least one oil and/or one gum and/or at least one resin into a mixture of water + surface-active agent(s) + optional water-soluble polymer(s), and then blending at a temperature of the order of 10 to 50°C in mixers of the extruder type with single or multiple screw(s), turbine planet wheel mixers, static mixers, blade, screw and arm mixers, etc.

6) Process according to one of claims 1) to 5), characterized in that the said (poly)isocyanate oils and/or gums and/or resins are masked.

7) Emulsion of the oil-in-water type, characterized in that it contains at least one (poly)isocyanate(s) and that it can be obtained by the process according to claim 1.

8) Emulsion of oil-in-water type, characterized in that the said at least one (poly)isocyanate(s) is masked.